WHAT IS CLAIMED IS:

1. A radio frequency device, comprising:

a signal layer having radio frequency (RF) transmission lines disposed over a ground plane, the RF lines configured and dimensioned to provide impedance matching along the RF lines; and

a shield formed as a part of the RF lines and disposed below an RF choke of a DC current supply to form an intermediate capacitance between the choke and the shield to control parasitic effects.

2. The device as recited in claim 1, wherein the device includes an optical transceiver having a laser biased by the DC current supply.

3. The device as recited in claim 1, wherein the intermediate capacitance and impedances of the parasitic effects form a Wheatstone Bridge type circuit which controls the parasitic effects.

4. The device as recited in claim 1, wherein a balance between the intermediate capacitance versus the parasitic effects is achieved to provide a flat or peaked transmission response over a selected frequency range.

5. The transceiver as recited in claim 4, wherein the balance includes:

$C_s/C_g \geq R_l/R_m$ where C_s is the intermediate capacitance, C_g is a parasitic capacitance between the choke and the ground plane, R_m is a matching resistor and R_l is the load.

6. The transceiver as recited in claim 1, further comprising a submount for supporting the choke.

7. The transceiver as recited in claim 1, wherein the RF line supplies AC signals to a laser diode.

8. The transceiver as recited in claim 7, further comprising a lens to focus light output from the laser

diode.

9. The transceiver as recited in claim 1, further comprising a photodiode.

10. An optical transceiver, comprising:

a substrate having a signal layer formed thereon, the signal layer having radio frequency (RF) transmission lines disposed over a ground plane, the RF lines configured and dimensioned to provide impedance matching along the RF lines, the RF lines having a portion forming a shield;

the shield being disposed below an RF choke of a DC current supply to form an intermediate capacitance between the choke and the shield to control parasitic effects; and

a laser modulated in accordance with RF signals transmitted by the RF lines.

11. The transceiver as recited in claim 10, wherein the laser is biased by the DC current supply.

12. The transceiver as recited in claim 10, wherein the intermediate capacitance and impedances of the parasitic effects form a Wheatstone Bridge type circuit which controls the parasitic effects.

13. The transceiver as recited in claim 10, wherein a balance between the intermediate capacitance versus the parasitic effects is achieved to provide a flat or peaked transmission response over a selected frequency range.

14. The transceiver as recited in claim 13, wherein the balance includes:

$C_s/C_g \geq R_l/R_m$ where C_s is the intermediate capacitance, C_g is a parasitic capacitance between the choke and the ground plane, R_m is a matching resistor and R_l is the load.

15. The transceiver as recited in claim 10, further comprising a submount for supporting the choke.

16. The transceiver as recited in claim 10, further

comprising a lens to focus light output from the laser.

17. The transceiver as recited in claim 1, further comprising a photodiode.

18. A method for fabricating a transceiver, which simultaneously provides impedance matched transmission for radio frequency (RF) and shields against transmission losses due to parasitic effects, comprising the steps of:

identifying parasitic electromagnetic elements associated with an RF choke for a given placement on a substrate; and

placing and dimensioning RF lines on the bench to form impedance matched RF lines wherein a portion of the RF lines shield the RF choke for a given bandwidth such that impedance matching and control of parasitic effects of the RF choke are simultaneously provided.

19. The method as recited in claim 18, further comprising the step of iteratively modifying the placing

and dimensioning of the RF lines to meet specifications.

20. The method as recited in claim 18, wherein the parasitic effects include a parasitic inductance for an electrical path from the RF choke to a laser and a parasitic capacitance between the RF choke and ground plane.

21. The method as recited in claim 18, further including a submount for the RF choke and further comprising the step of modifying the RF choke submount location such that a parasitic capacitance of the RF choke to ground is shielded.

22. The method as recited in claim 18, wherein the transceiver is an optical transceiver.

23. The method as recited in claim 18, further comprising forming an intermediate capacitance using the shield wherein the intermediate capacitance and impedances of the parasitic effects form a Wheatstone Bridge type

circuit which controls the parasitic effects.

24. The method as recited in claim 23, further comprising balancing between the intermediate capacitance versus the parasitic effects to provide a flat or peaked transmission response over a selected frequency range.

25. The method as recited in claim 24, wherein the balancing includes:

establishing $C_s/C_g \geq R_l/R_m$ where C_s is the intermediate capacitance, C_g is a parasitic capacitance between the choke and the ground plane, R_m is a matching resistor and R_l is the load.